

REMARKS

Claims 1-10 and 33-54 are pending in the present application.

Claims 1-10, 31, and 32 have been previously withdrawn without *prejudice*.

Claims 11-30 have been previously canceled without *prejudice*.

Claims 33 and 44 stand rejected under 35 U.S.C. § 103(a) over Lupien et al., U.S. Patent No. 6,098,051 (hereinafter “*Lupien*”) in view of U.S. Patent No. 6,016,483 to Rickard et al. (hereinafter “*Rickard*”).

Claims 34-36, 38, 39, 41-43, 45-50, and 52-54 stand rejected under 35 U.S.C. § 103(a) over *Lupien* in view of *Rickard* further in view of *Official Notice* as allegedly evidenced by U.S. Publication No. 2003/0088452 to Kelly (hereinafter “*Kelly*”).

Claims 37, 40, 48, and 51 stand rejected under 35 U.S.C. § 103(a) over *Lupien* in view of *Rickard* and *Official Notice* as allegedly evidenced by *Kelly* and further in view of *Official Notice* as allegedly evidenced by U.S. Publication No. 2001/0044771 to Usher et al. (hereinafter “*Usher*”).

Applicant notes with thanks the Examiner’s response of 7 December 2009. Applicant further notes with thanks the Examiner’s withdrawal of the previous rejections of Claims 33 and 44 under U.S.C. § 112, second paragraph.

Applicant respectfully submits that all of Applicant’s arguments and amendments are without *prejudice* or *disclaimer*. In addition, Applicant has merely discussed example distinctions from the cited prior art. Other distinctions may exist, and as such, Applicant reserves the right to discuss these additional distinctions in a future Response or on Appeal, if appropriate. Applicant further respectfully submits that by not responding to additional statements made by the Examiner, Applicant does not acquiesce to the Examiner’s additional statements. The example distinctions discussed by Applicant are considered sufficient to overcome the Examiner’s rejections. In addition, Applicant reserves the right to pursue broader

claims in this Application or through a continuation patent application. No new matter has been added.

I. Rejections Under 35 U.S.C. § 103(a)

Claims 33 and 44 stand rejected under 35 U.S.C. § 103(a) over *Lupien* in view of *Rickard*. Claims 34-36, 38, 39, 41-43, 45-50, and 52-5 stand rejected under 35 U.S.C. § 103(a) over *Lupien* in view of *Rickard* further in view of *Official Notice* as allegedly evidenced by *Kelly*. Claims 37, 40, 48, and 51 stand rejected under 35 U.S.C. § 103(a) over *Lupien* in view of *Rickard* and *Official Notice* as allegedly evidenced by *Kelly* and further in view of *Official Notice* as allegedly evidenced by *Usher*. Applicant respectfully traverses the Examiner's obvious rejection of Claims 33-54 under 35 U.S.C. § 103(a) over the proposed combination of *Lupien*, *Rickard*, and *Official Notice*, either individually or in combination.

In rejecting Claim 33, the Examiner states the following:

Lupien et al. teaches computer-implemented method, comprising:
receiving bids for one or more items from a plurality of buyer computer systems (column 2, lines 5-9; column 27, lines 5-13; column 8; abstract);
receiving asks for one or more items from a plurality of seller computer systems (column 2, lines 5-9; column 27, lines 5-13; column 8; abstract);

generating a plurality of representing a between a bid and an ask for an item, wherein the plurality of specify values for a plurality of variables (abstract; column 4, lines 27-48; column 2, lines 5-9; column 27, lines 5-13; column 8; Figs. 7 and Fig. 9 A); determining a first value specified in one of the plurality of for a first variable (Figs. 2, 6-7 and 9A-9B; abstract; column 4, lines 27-48; column 2, lines 5-9; column 27, lines 5-13; column 8; column 12, lines 31-37);

determining a second value specified in one of the plurality of for a second variable (Figs. 2, 6-7 and 9A-9B; abstract; column 4, lines 27-48; column 2, lines 5-9; column 27, lines 5-13; column 8; column 12, lines 31-37);

determining a third value specified in one of the plurality of for a third variable (Figs. 2, 6-7 and 9A-9B; abstract; column 4, lines 27-48; column 8; column 12, lines 31-37); determining a fourth value specified in one of the plurality of for a fourth variable (Figs. 2,6-7 and 9A-9B; abstract; column 4, lines 27-48; column 2, lines 5-9; column 27, lines 5-13; column 8; column 12, lines 31-37); and

communicating the determined values for the plurality of variables for the item to the buyer and seller computer system (Figs. 2, 6-7 and 9A-9B; abstract; column 4, lines 27-48; column 2, lines 5-9; column 27, lines 5-13; column 8; column 12, lines 31-37).

(7 December 2009 Final Office Action, pages 2-3). As pointed out in Applicant's previous Response, *the Examiner has omitted various claim terms* from Applicant's claims. For example, by omitting the claim terms "strike," "strikes" and "strike variable" render the above limitations of Applicant's Claim 33 nonsensical groupings of words lacking any logical meaning according to ordinary precepts of the English language. That is the Examiner states "Lupien et al. teaches" "generating a plurality of [_____] representing a [_____] between a bid and an ask for a particular item, wherein the plurality of [_____] specify values for a plurality of [_____] variables" instead of "generating a plurality of *[strikes]* representing a *[strike]* between a bid and an ask for a particular item, wherein the plurality of *[strikes]* specify values for a plurality of *[strike]* variables," as required by Claim 33.

As such, *Applicant respectfully requests further clarification from the Examiner*, in particular how can *Lupien* properly be said to disclose any of these limitations (i.e., generating a plurality of *what?* representing a *what?* between a bid and an ask for a particular item, wherein the plurality of *what?* specify values for a plurality of *what?* variables) based on the Examiner's arbitrary interpretation of Applicant's Claim 33 as used to interpret the disclosure of *Lupien*.

Applicant respectfully submits that *Lupien* fails to disclose at least the following limitations of Claim 33:

generating, by the computer, a plurality of strikes representing a strike between a bid and an ask for an item, wherein the plurality of strikes specify values for a plurality of strike variables;

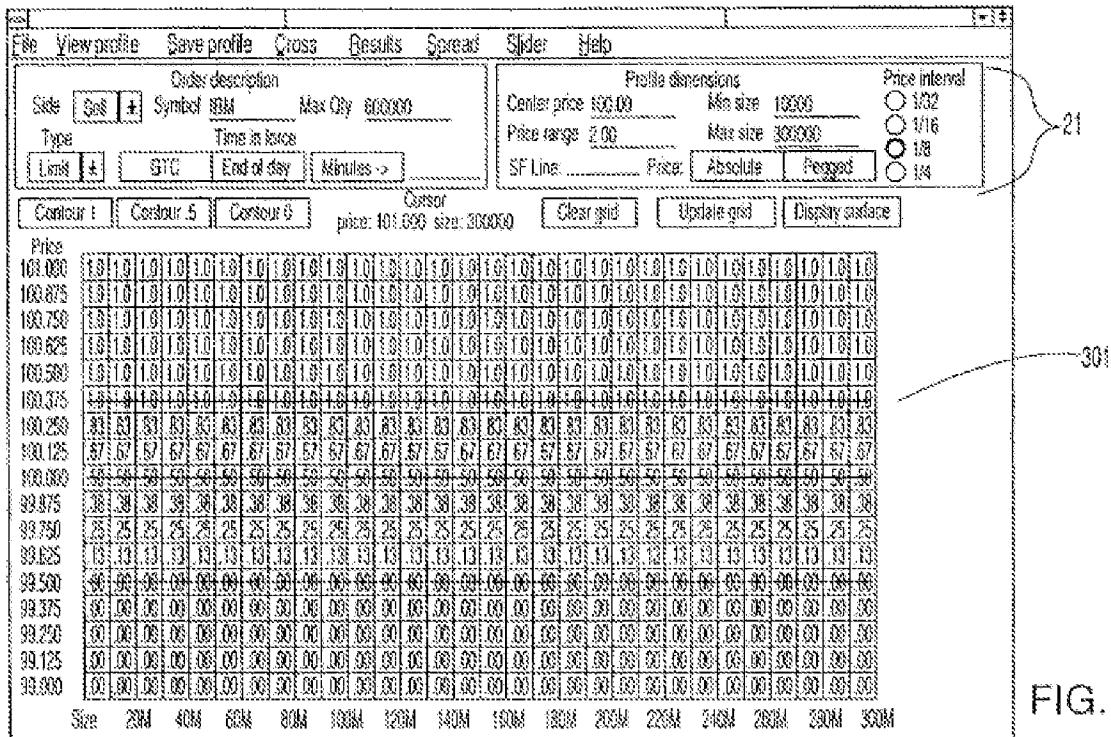
determining, by the computer, a first value specified in one of the plurality of strikes for a first strike variable;

determining, by the computer, a second value specified in one of the plurality of strikes for a second strike variable;

determining, by the computer, a third value specified in one of the plurality of strikes for a third strike variable;

determining, by the computer, a fourth value specified in one of the plurality of strikes for a fourth strike variable;

To provide additional clarification in support of Applicant's position that *Lupien* fails to disclose the above-referenced limitations of Claim 33, Applicant respectfully directs the Examiner's attention to Figure 6 and column 4, lines 8-48 of the specification of *Lupien*, on which the Examiner relies, provided below:



The **satisfaction density profile** is a two-dimensional grid or matrix (which could also be represented as a two-dimensional graph or in another two-dimensional format), **one dimension being price and the second dimension being size of transaction, that as a whole characterizes the trader's degree of satisfaction for a transaction at each (price, size) coordinate**. Each element of the satisfaction density profile, called a satisfaction density value, indicates the trader's degree of satisfaction to trade that size order at that price. In the representative embodiment, each satisfaction density value is a number between zero and one, with zero representing no satisfaction (i.e., will under no circumstances trade that quantity at that price) and one representing total satisfaction.

Each trader can input one or more satisfaction density profiles. In the representative embodiment, each satisfaction density profile can be represented and input as a graph of at least two dimensions, such as, for example, as a temperature grid or two dimensional matrix.

Once the satisfaction density profile is complete, the trader causes the satisfaction density profile to be transmitted to a central matching controller ("CMC"), which anonymously matches buy and sell orders as discussed below.

For the purpose of explanation, assume a batch process in which multiple traders enter satisfaction density profiles that represent either buy or sell orders for a particular stock. Upon transmission of the satisfaction density profiles to the CMC, the CMC will cause buy profiles to be stored in a buy profile database and sell profiles to be stored in a sell profile database. The CMC will then calculate, for every buy/sell profile pair, a mutual satisfaction cross product profile. **The**

mutual satisfaction cross product profile represents the degree to which that buy/sell pair can satisfy each other at each grid value of price and size. Next, the individual grid values of the mutual satisfaction cross products for all buy/sell combinations are ranked in order, starting with the highest value of mutual satisfaction. The buy/sell orders represented by the ranked grid values of the mutual satisfaction cross products are then matched in order, and matching trades are aggregated by the CMC system. The matching process then continues down the ranked list. (Emphasis added).

Applicant respectfully submits that nowhere does *Lupien* disclose *determining first, second, third, and fourth values specified in one of the plurality of strikes for a first, second, third, and fourth strike variable*, respectively, as required by Applicant's Claim 33. Rather, *Lupien* discloses, among other things, a profile of buy/sell pairs organized in a grid of cross products for buy/sell combinations, as shown above. Each buy/sell pair does not represent a separate strike variable, but is merely the combination or product of two variables, specifically, the buy value and the sell value. Applicant respectfully submits that the Examiner mischaracterizes the values comprising a profile of cross products as distinct strike variables, when in fact, these values are merely cross products of only two variables, the buy and sell values. Thus, *Lupien* fails to disclose at least the above referenced limitations of Applicant's Claim 33.

Additionally, in rejecting Applicant's Claim 33, the Examiner states the following:

Lupien et al. does not teach: strike; strikes;

Rickard et al. teaches: strike (column 1, lines 55-61; column 3, lines 1-9); strikes (column 1, lines 55-61; column 3, lines 1-9).

(7 December 2009 Final Office Action, page 3). Applicant thanks the Examiner for noting that *Lupien* fails to disclose a “***strike***” or “***strikes***.” However Applicant respectfully disagrees with the Examiner's assertion that *Rickard* provides these missing elements and in fact, respectfully submits that *Rickard* fails to disclose at least the limitation of Claim 33 of *generating a plurality of strikes representing a strike between a bid and an ask for a particular item, wherein the plurality of strikes specify values for a plurality of strike variables and determining first, second, third, and fourth values specified in one of the plurality of strikes for a first, second, third, and fourth strike variable*.” For additional clarification, Applicant respectfully directs the Examiner's attention to cited portions of *Rickard*, provided below, on which the Examiner relies:

BACKGROUND OF THE INVENTION

* * *

An equity option is a securities contract which conveys to its owner the right, but not the obligation, to buy or sell a particular stock (called the underlying) at a specific price (called the strike price) on or before a given date.

Typically, there are two basic types of options, namely, Put options and Call options. An American-style equity Call option gives its owner the right to buy 100 shares of the underlying stock at the strike price on or before a given date. An American-style equity Put option gives its owner the right to sell 100 shares of the underlying stock at the strike price on or before a given date. (Column 1, lines 52-61).

* * *

... which is less than the price the owner would have to pay to buy the shares in the open market. A Put option is in-the-money if the underlying stock price is below the strike price. An option is at-the-money when it has a strike price that is approximately equal to the current market price of the underlying stock. A Call option is out-of-the-money if the underlying stock price is below the strike price. A Put option is out-of-the-money if the underlying stock price is above the strike price. (column 3, lines 1-9).

Applicant respectfully submits that the “**BACKGROUND OF THE INVENTION**” section of *Rickard*, on which the Examiner relies, fails to disclose at least *generating a plurality of strikes representing a strike between a bid and an ask for a particular item, wherein the plurality of strikes specify values for a plurality of strike variables and determining first, second, third, and fourth values specified in one of the plurality of strikes for a first, second, third, and fourth strike variable*, as required by Applicants’ Claim 33. By contrast, as shown above, the “**BACKGROUND OF THE INVENTION**” section of *Rickard* discloses, among other things, problems associated with opening and reopening of trading in an options market. Applicant respectfully submits that this is not analogous to *generating a plurality of strikes that specify values for a plurality of strike variables*, as required by Claim 33. More simply stated problems of trading in an options market as disclosed in *Rickard* does not equate to *strikes that specify values for a plurality of strike variables*.

Thus, Applicant is unclear as to the Examiner’s reasoning for asserting that the above-referenced portion of *Rickard* discloses the limitation of Claim 33 of *generating a plurality of strikes representing a strike between a bid and an ask for a particular item, wherein the plurality of strikes specify values for a plurality of strike variables and determining first, second, third, and fourth values specified in one of the plurality of strikes for a first, second, third, and fourth strike variable*. While further distinctions exist, the reasons discussed in detail

above detailing *Rickard*'s failure to disclose *generating a plurality of strikes representing a strike between a bid and an ask for a particular item, wherein the plurality of strikes specify values for a plurality of strike variables and determining first, second, third, and fourth values specified in one of the plurality of strikes for a first, second, third, and fourth strike variable*, as required by Claim 33 is more than sufficient to distinguish Claim 33 from *Rickard*. Accordingly, Applicant respectfully requests that the rejections under 35 U.S.C. § 103(a) of Applicants' claims be withdrawn.

In rejecting Applicant's Claim 34, the Examiner states the following:

Lupien further teaches comprising:

generating a display of the received data, the display comprising:

a plurality of polygons, each polygon representing the between the bid and the ask, each polygon comprising first and second each associated with one or more different variables, a first dimension of the first reflecting the first value specified in the represented for the first variable, a second dimension of the first reflecting the second value specified in the represented for the second variable, a first dimension of the second reflecting the third value specified in the represented for the third variable, and a second dimension of the second reflecting the fourth value specified in the represented for the fourth variable (Figs. 2, 6-7, 9A-9B; column 4, lines 27-48, column 12 lines 31-37 and column 10, lines 53-64; abstract);

a variable axis representing a range of values for an additional variable for which no value is reflected in the, wherein the variable axis is vertical and each polygon is positioned with respect to the variable axis according to the value specified in the represented for the additional variable represented by the variable axis; and a time axis that is perpendicular to the variable axis, each polygon being positioned with respect to the time axis according to a time at which the represented occurred (Figs. 2, 6-7, 9A-9B; column 4, lines 27-48, column 12 lines 31-37 and column 10, lines 53-64; abstract).

(7 December 2009 Final Office Action, page 3). Applicant respectfully disagrees with the Examiner's assertions and respectfully submits that *Lupien* fails to disclose at least the following limitations of Claim 34, provided below in their entirety:

a plurality of polygons, *each polygon representing a strike between a bid and an ask, each polygon comprising first and second contiguous parallelograms* each associated with one or more different strike variables, *a first dimension of the first parallelogram reflecting a first value specified in the represented strike for a first strike variable, a second dimension of the first parallelogram reflecting a second value specified in the represented strike for a*

second strike variable, a first dimension of the second parallelogram reflecting a third value specified in the represented strike for a third strike variable, and a second dimension of the second parallelogram reflecting a fourth value specified in the represented strike for a fourth strike variable;

a strike variable axis representing a range of values for an additional strike variable for which no value is reflected in the parallelograms, wherein the strike variable axis is substantially vertical and each polygon is positioned with respect to the strike variable axis according to the value specified in the represented strike for the additional strike variable represented by the strike variable axis; and

a time axis that is substantially perpendicular to the strike variable axis, each polygon being positioned with respect to the time axis according to a time at which the represented strike occurred.

Applicant once again respectfully directs the Examiner's attention to Figure 6 and the portion of column 4 of the specification of *Lupien* shown above that the Examiner relies on to disclose these limitations. For the same reasons as discussed with regard to the limitations of Claim 33, *Lupien* fails to disclose at least "*each polygon representing a strike between a bid and an ask, each polygon comprising first and second contiguous parallelograms*" as required by Claim 34. More specifically, *Lupien* discloses, among other things, a profile of buy/sell pairs organized in a grid of cross products for buy/sell combinations which are not analogous to separate strike variables, but merely represent a product of the buy value and the sell value. As such, *Lupien* cannot be said to disclose the above-referenced limitations of Claim 34.

Applicant further respectfully submits that *Rickard* also fails to provide these missing teachings and respectfully traverse the Examiner's assertion of Official Notice to fill in these gaps in the disclosures of *Lupien* and *Rickard*. Accordingly, Applicant respectfully requests that the Examiner's rejection to Claims 33-54 under 35 U.S.C. § 103(a) be withdrawn.

II. The Examiner's Official-Notice is Improper under MPEP § 2144.03

Applicant respectfully traverses the Official Notice because the asserted facts, as best understood by Applicant, are not considered to be common knowledge or well-known in the art and are not supported by substantial documentary evidence or any type of documentary evidence but appear to be the Examiner's opinions formulated using the subject Application as a template, which constitutes impermissible use of hindsight. Furthermore, under these circumstances, it is inappropriate for the Examiner to take Official Notice without documentary evidence to support the

Examiner's conclusion. (See MPEP § 2144.03). *Applicant respectfully requests the Examiner to produce authority for the Examiners Official Notice.*

Only "in limited circumstances," is it "appropriate for an examiner to take official notice of facts not in the record or to rely on common knowledge in making a rejection". (MPEP § 2144.03). "Official notice unsupported by documentary evidence **should only be taken by the examiner** where the facts asserted to be well-known, or to be common knowledge in the art are **capable of instant and unquestionable demonstration as being well-known**.

With respect to the subject Application, the Examiner's statement that "Official Notice is taken that contiguous parallelograms and parallelograms is old and well known in the business world as a convenient way for individual or company to display essential data in a visual view" and "Official Notice is taken that strike variables for which values are specified in the strikes comprise strike price, strike quantity, and at least one additional strike variable is old and well known in the finance industry as a convenient way for individual or company to invest" *is not capable of instant and unquestionable demonstration as being well-known*. (7 December 2009 Final Office Action, pages 5-11). As noted by the court in *In re Ahlert*, 424 F.2d 1088, 1091, 165 USPQ 418, 420 (CCPA 1970), the notice of facts beyond the record which may be taken by the examiner must be '*capable of such instant and unquestionable demonstration as to defy the dispute*' (citing *In re Knapp Monarch Co.*, 296 F.2d 230, 132 U.S.P.Q. 6 (C.C.P.A. 1961))." (MPEP § 2144.03(A)). (Emphasis Added).

"It is *never appropriate to rely solely on "common knowledge" in the art without evidentiary support in the record*, as the principal evidence upon which a rejection was based. *Zurko*, 258 F.3d at 1385, 59 USPQ2d at 1697. As the court held in *Zurko*, an assessment of basic knowledge and common sense that is not based on any evidence in the record lacks substantial evidence support. *Id.* at 1385, 59 USPQ2d at 1697. See also *In re Lee*, 277 F.3d 1338, 1344-45, 61 USPQ2d 1430, 1434-35 (Fed. Cir. 2002)." (MPEP § 2144.03(A)).

"Ordinarily, there must be some form of evidence in the record to support an assertion of common knowledge. See *Lee*, 277 F.3d at 1344-45, 61 USPQ2d at 1434-35 (Fed. Cir. 2002); *Zurko*, 258 F.3d at 1386, 59 USPQ2d at 1697 (holding that **general conclusions concerning what is "basic knowledge" or "common sense" to one of ordinary skill in the art without specific factual**

findings and some concrete evidence in the record to support these findings will not support an obviousness rejection). The examiner must provide specific factual findings predicated on sound technical and scientific reasoning to support his or her conclusion of common knowledge. See *Soli*, 317 F.2d at 946, 37 USPQ at 801; *Chevenard*, 139 F.2d at 713, 60 USPQ at 241. The applicant should be presented with the explicit basis on which the examiner regards the matter as subject to official notice and be allowed to challenge the assertion in the next reply after the Office action in which the common knowledge statement was made.” (MPEP § 2144.03(B)). (Emphasis Added).

With respect to the subject Application, *the Examiner has not properly Officially Noticed or not properly based the Official Notice on common knowledge*. The Examiner's conclusory statement:

Official Notice is taken that contiguous parallelograms, parallelogram and parallelograms is old and well known in the business world as a convenient way for individual or company to display essential data in a visual view. Therefore, it would have been obvious at the time of the invention to have included contiguous parallelograms, parallelogram and parallelograms to the method of Lupien. The Official Notice is evidenced by Kelly, US Publication Number: 2003/0088452 A1 (paragraph 0150; Fig. 10).

(7 December 2009 Final Office Action, page 5). Applicant respectfully submits that the above noticed Examiner's conclusory statement *does not adequately address the issue that this statement is considered to be common knowledge or well-known in the art*. To provide additional clarification in support of Applicant's position that *this statement is not considered to be common knowledge or well-known in the art*, Applicant respectfully directs the Examiner's attention to Figure 10 and paragraph 0150 of the specification of *Kelly*, on which the Examiner relies, provided below:

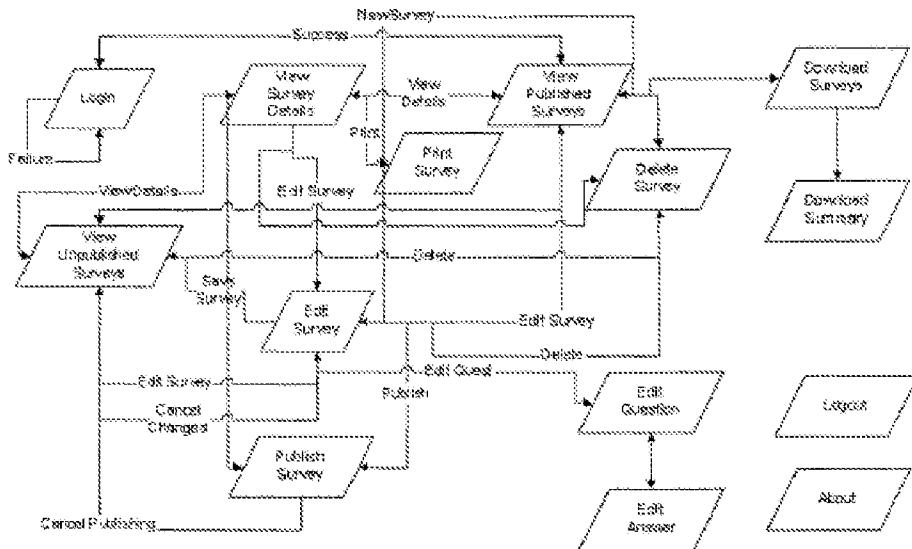


Figure 10

FIG. 10 displays a flowchart representing the workflow of the optional web-based authoring tool. The parallelograms represent application screens that the user can interact with from within a web browser such as Netscape Navigator or Microsoft Internet Explorer; the directional lines represent specific actions taken by the user. For example, the directional line labeled "Success" from the "Login" parallelogram to the "View Published Surveys" parallelogram represents a successful login by the users.

Applicant respectfully submits that nowhere does *Kelly* disclose "a plurality of polygons, *each polygon representing a strike between a bid and an ask, each polygon comprising first and second contiguous parallelograms* each associated with one or more different strike variables, *a first dimension of the first parallelogram reflecting a first value specified in the represented strike for a first strike variable, a second dimension of the first parallelogram reflecting a second value specified in the represented strike for a second strike variable, a first dimension of the second parallelogram reflecting a third value specified in the represented strike for a third strike variable, and a second dimension of the second parallelogram reflecting a fourth value specified in the represented strike for a fourth strike variable*," as required by Applicant's Claim 33. Rather, *Kelly* merely discloses, among other things, a flowchart representing the workflow of the optional web-based authoring tool. The flowchart comprises parallelograms that merely represent application screens. Applicant respectfully submits that the Examiner mischaracterizes the

parallelograms as being contiguous parallelograms having dimensions, when in fact, these parallelograms of *Kelly* are not contiguous and are not associated with any dimensions reflecting a value. Thus, *Kelly* fails to provide any evidence of the Examiner's Official Notice.

Applicant respectfully submits that the Office Action provides no documentary evidence to support the Official Notice taken by the Examiner, yet the asserted facts are not capable of "instant and unquestionable" demonstration as being well-known. Applicant further respectfully submits that Applicant has adequately traversed the Examiner's assertion of Official Notice and directs the Examiner's attention to the pertinent text of the MPEP, which states:

If applicant adequately traverses the examiner's assertion of official notice, the examiner must provide documentary evidence in the next Office action if the rejection is to be maintained. See 37 CFR 1.104(c)(2). See also *Zurko*, 258 F.3d at 1386, 59 USPQ2d at 1697 ("[T]he Board [or examiner] must point to some concrete evidence in the record in support of these findings" to satisfy the substantial evidence test). If the examiner is relying on personal knowledge to support the finding of what is known in the art, the examiner must provide an affidavit or declaration setting forth specific factual statements and explanation to support the finding. See 37 CFR 1.104(d)(2). (MPEP § 2144.03(C)).

Thus, if the Examiner continues to reject Applicant's claims based on the Official Notice, Applicant respectfully requests that the Examiner provide documentary evidence as necessitated by MPEP § 2144.03(C). Furthermore, if the Examiner is relying on personal knowledge to support the finding of what is known in the art, Applicant further respectfully requests that the Examiner provide an affidavit or declaration setting forth specific factual statements and explanation to support the finding as further necessitated by MPEP § 2144.03(C).

III. The Office Action Fails to Properly Establish a *Prima Facie* case of Obviousness over the Proposed *Lupien-Rickard*-Official-Notice Combination According to the UPSTO Examination Guidelines

Applicant respectfully submits that the Office Action fails to properly establish a *prima facie* case of obviousness based on the proposed combination of *Lupien*, *Rickard*, or the Examiner's Official Notice, either individually or in combination, and in particular, the Office Action fails to establish a *prima facie* case of obviousness based on the "Examination Guidelines for Determining Obviousness Under 35 U.S.C. 103 in View of the Supreme Court Decision in *KSR International Co. v. Teleflex Inc.*" (the "Guidelines").

As reiterated by the Supreme Court in *KSR International Co. v. Teleflex Inc.* (*KSR*), the framework for the objective analysis for determining obviousness under 35 U.S.C. 103 is stated in *Graham v. John Deere Co.* (383 U.S. 1, 148 USPQ 459 (1966)). Obviousness is a question of law based on underlying factual inquiries. These factual inquiries enunciated by the Court are as follows:

- (1) Determining the scope and content of the prior art;
- (2) Ascertaining the differences between the claimed invention and the prior art; and
- (3) Resolving the level of ordinary skill in the pertinent art.

(Notice, 72 Fed. Reg. 57527 (Oct. 10, 2007)). Objective evidence relevant to the issue of obviousness must be evaluated by Office personnel. (383 U.S. 17–18, 148 USPQ 467 (1966)). As stated by the Supreme Court in *KSR*, “While the sequence of these questions might be reordered in any particular case, the [*Graham*] factors continue to define the inquiry that controls.” (*KSR*, 550 U.S. at __, 82 USPQ2d at 1391).

However, it is important to note that the Guidelines require that Office personnel “*ensure that the written record includes findings of fact* concerning the state of the art and the teachings of the references applied. (Notice, 72 Fed. Reg. 57527 (Oct. 10, 2007)). In addition, the Guidelines remind Office personnel that the “*factual findings made by Office personnel are the necessary underpinnings to establish obviousness.*” (*id.*). Further, “*Office personnel must provide an explanation to support an obviousness rejection* under 35 U.S.C. 103. (*id.*). In fact, “35 U.S.C. 132 requires that the applicant be notified of the reasons for the rejection of the claim so that he or she can decide how best to proceed” and “clearly setting forth findings of fact and the rationale(s) to support a rejection in an Office action leads to the prompt resolution of issues pertinent to patentability.” (*id.*).

With respect to the subject application, the Office Action has not shown the *factual findings necessary to establish obviousness* or even *an explanation to support the obviousness rejection* based on the proposed combination of *Lupien, Rickard*, and Examiner’s Official Notice. The Office Action merely states that “it would have been *prima facie* obvious at the time of the invention to have included strike and strikes feature to the method of *Lupien et al.*” (7 December 2009 Final Office Action, pages 5-6). Applicant respectfully disagrees and respectfully submits that the

Examiner's conclusory statement is not sufficient to establish the *factual findings necessary to establish obviousness* and is not a sufficient *explanation to support the obviousness rejection* based on the proposed combination of *Lupien, Rickard*, and the Examiner's Official Notice. *Applicant respectfully requests that the Examiner provide proper support for the obviousness rejection under 35 U.S.C. 103 as necessitated by the Guidelines, including the factual findings necessary to establish obviousness to "ensure that the written record includes findings of fact concerning the state of the art and the teachings of the references applied.* (Notice, 72 Fed. Reg. 57527 (Oct. 10, 2007)).

The Guidelines further provide guidance to Office personnel in "determining the scope and content of the prior art" such as, for example, "Office personnel must first obtain a thorough understanding of the invention disclosed and claimed in the application." (Notice, 72 Fed. Reg. 57527 (Oct. 10, 2007)). The scope of the claimed invention must be clearly determined by giving the claims the "broadest reasonable interpretation consistent with the specification." (See *Phillips v. AWH Corp.*, 415 F.3d 1303, 1316, 75 USPQ2d 1321, 1329 (Fed. Cir. 2005) and MPEP § 2111.). In addition, the Guidelines state that any "*obviousness rejection should include*, either explicitly or implicitly in view of the prior art applied, *an indication of the level of ordinary skill.*" (Notice, 72 Fed. Reg. 57528 (Oct. 10, 2007)). With respect to the subject Application, the Office Action has not provided *an indication of the level of ordinary skill. Applicant respectfully requests that the Examiner provide proper support for the obviousness rejection under 35 U.S.C. 103 as necessitated by the Guidelines, including an indication of the level of ordinary skill, relied upon by the Examiner.* (Notice, 72 Fed. Reg. 57527 (Oct. 10, 2007)).

The Guidelines still further provide that once the *Graham* factual inquiries are resolved, Office personnel must determine whether the claimed invention would have been obvious to one of ordinary skill in the art. (*Id.*). For example, the Guidelines state that *Office personnel must explain why the difference(s) between the prior art and the claimed invention would have been obvious to one of ordinary skill in the art.* (*Id.*). In addition, the Guidelines state that the proper analysis is *whether the claimed invention would have been obvious to one of ordinary skill in the art after consideration of all the facts.* (*Id.* and See 35 U.S.C. 103(a)).

With respect to the subject Application, the Office Action has not expressly resolved any of the *Graham* factual inquiries to determine whether Applicant invention would have been obvious to one of ordinary skill in the art. In addition, the Office Action fails to *explain why the difference(s) between the proposed combination of Lupien, Rickard, the Examiner's Official Notice and Applicant's claimed invention would have been obvious to one of ordinary skill in the art*. The Office Action merely states “because Rickard et al. teaches that adding the feature helps determine a set of opening prices.” (7 December 2009 Final Office Action, pages 5-6). Applicant respectfully disagrees and further respectfully requests clarification as to how this statement *explains why the difference(s) between the proposed combination of Lupien, Rickard, and the Examiner's Official Notice and Applicant's claimed invention would have been obvious to one of ordinary skill in the art*. Applicant further respectfully submits that the Examiner is using the subject Application as a template to formulate reconstructive hindsight, which constitutes impermissible use of hindsight under 35 U.S.C. § 103(a).

The Guidelines yet further state that the “key to supporting any rejection under 35 U.S.C. 103 is the *clear articulation of the reason(s) why the claimed invention would have been obvious.*” (Notice, 72 Fed. Reg. 57528 (Oct. 10, 2007)). In fact, the Supreme Court in *KSR* noted that “*the analysis supporting a rejection under 35 U.S.C. 103 should be made explicit.*” (*id.*). The Court quoting *In re Kahn* (441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006)), stated that ““[R]ejections on *obviousness cannot be sustained by mere conclusory statements*; instead, there *must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.*”” (*KSR*, 550 U.S. at __, 82 USPQ2d at 1396). The Guidelines provide the following seven rationales:

- (A) Combining prior art elements according to known methods to yield predictable results;
- (B) Simple substitution of one known element for another to obtain predictable results;
- (C) Use of known technique to improve similar devices (methods, or products) in the same way;
- (D) Applying a known technique to a known device (method, or product) ready for improvement to yield predictable results;
- (E) “Obvious to try”—choosing from a finite number of identified, predictable solutions, with a reasonable expectation of success;
- (F) Known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other

market forces if the variations would have been predictable to one of ordinary skill in the art;

(G) Some teaching, suggestion, or motivation in the prior art that would have led one of ordinary skill to modify the prior art reference or to combine prior art reference teachings to arrive at the claimed invention.

Applicant respectfully submits that the *Office Action fails to provide any articulation, let alone, clear articulation of the reasons why Applicant's claimed invention would have been obvious*. For example, the *Examiner has not adequately supported the selection and combination of Lupien, Rickard, and the Examiner's Official Notice to render obvious Applicant's claimed invention*. The Examiner's unsupported conclusory statements that "it would have been *prima facie* obvious at the time of the invention to have included strike and strikes feature to the method of Lupien et al." and "because Rickard et al. teaches that adding the feature helps determine a set of opening prices" *do not adequately provide clear articulation of the reasons why Applicant's claimed invention would have been obvious*. (7 December 2009 Final Office Action, pages 5-6). In addition, the Examiner's unsupported conclusory statement fails to meet any of the Guidelines rationales to render obvious Applicant's claimed invention.

Thus, if the Examiner continues to maintain the obviousness rejection based on the proposed combination of *Lupien, Rickard*, and the Examiner's Official Notice, *Applicant respectfully requests that the Examiner provide proper support for the obviousness rejection under 35 U.S.C. § 103 as necessitated by the Guidelines, including a statement by the Examiner identifying which one of the seven rationales the Examiner is relying on and the proper analysis of that particular rationale, as required by the Guidelines*.

IV. Applicant's Claims are Patentable over the Proposed Lupien-Rickard-Official-Notice Combination

Applicant respectfully submits that Claim 33 is considered patentably distinguishable over the proposed combination of *Lupien, Rickard*, and the Examiner's Official Notice. This being the case, Claim 44 is also considered patentably distinguishable over the proposed combination of *Lupien, Rickard*, and the Examiner's Official Notice for at least the reasons discussed above in connection with Claim 33.

Furthermore, with respect to dependent Claims 34-43 and 45-54: Claim 34 depends from Claim 33, Claims 35-38 and 40-43 depend from Claim 34 which depends from Claim 33, Claims 39 depends from Claim 38, Claim 45 depends from Claim 44, Claims 46-49 and 51-54 depend from Claim 45 which depends from Claim 44 and Claim 50 depends from Claim 49, and are thus, also considered patentably distinguishable over the proposed combination of *Lupien* and the Examiner's Official Notice. Thus, dependent Claims 34-43 and 45-54 are considered to be in condition for allowance for at least the reason of depending from an allowable claim as well as for further limitations.

Thus, for at least the reasons set forth herein, Applicant respectfully submits that Claims 33-54 are not rendered obvious by the proposed combination of *Lupien*, *Rickard*, and the Examiner's Official Notice. Applicant further respectfully submits that Claims 33-54 are in condition for allowance. Thus, Applicant respectfully requests that the rejection of Applicant's claims under 35 U.S.C. § 103(a) be withdrawn and that Claims 33-54 be allowed.

CONCLUSION:

In view of the foregoing amendments and remarks, this application is considered to be in condition for allowance, and early reconsideration and a Notice of Allowance are earnestly solicited.

Although Applicant believes no additional fees are deemed to be necessary; the undersigned hereby authorizes the Director to charge any additional fees which may be required, or credit any overpayments, to **Deposit Account No. 500777**. If an extension of time is necessary for allowing this Response to be timely filed, this document is to be construed as also constituting a Petition for Extension of Time Under 37 C.F.R. § 1.136(a) to the extent necessary. Any fee required for such Petition for Extension of Time should be charged to **Deposit Account No. 500777**.

Please link this application to Customer No. 53184 so that its status may be checked via the PAIR System.

Respectfully submitted,

8 February 2010

Date

/Steven J. Laureanti/signed

Steven J. Laureanti, Registration No. 50,274

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